FIG. 1A

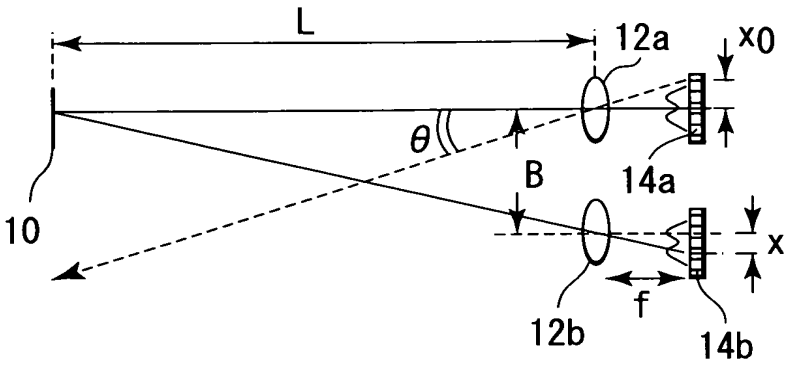
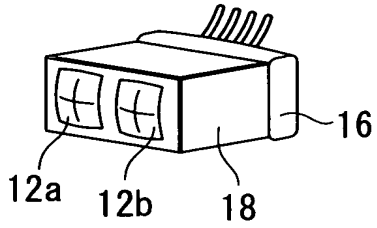


FIG. 1B



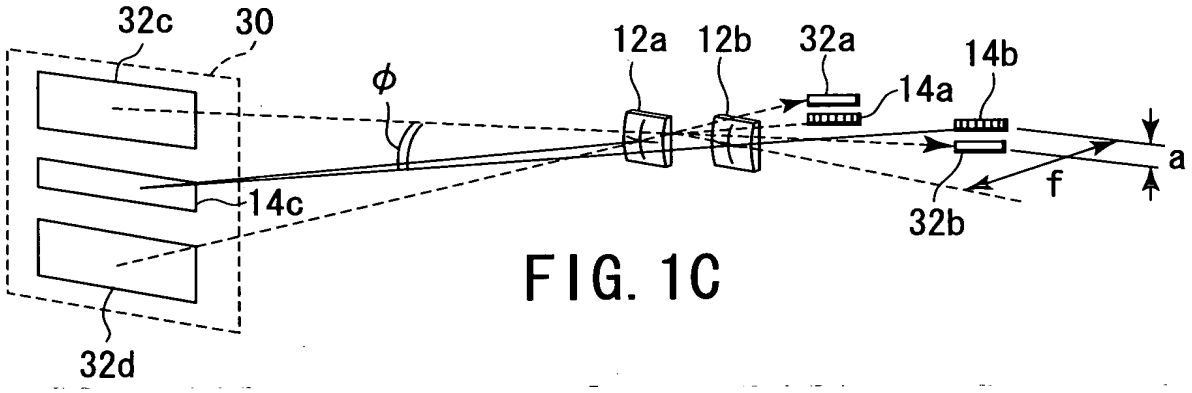
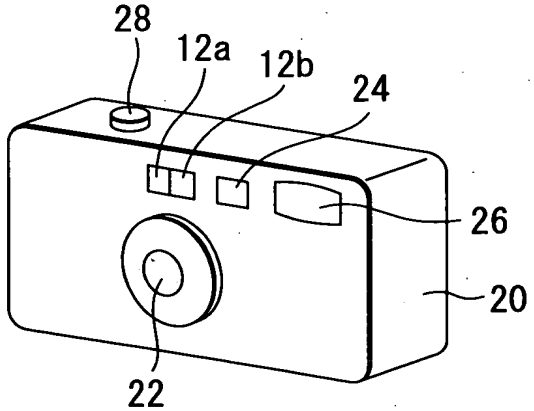


FIG. 1C

FIG. 2



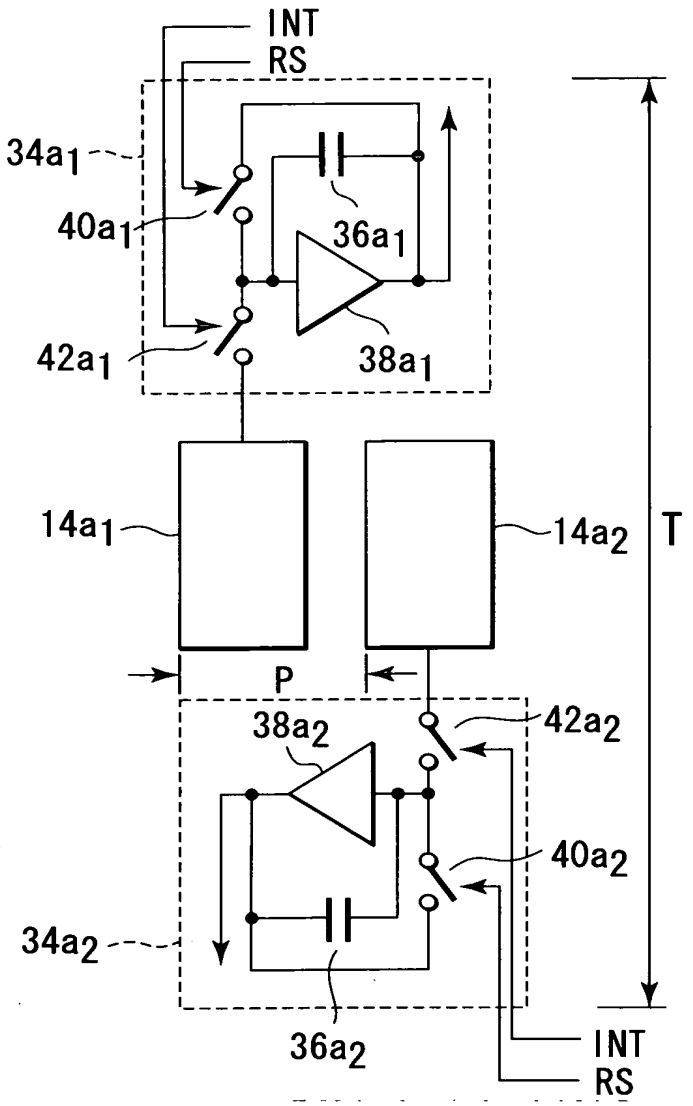

INT
RS
34a1
40a1
36a1
42a1
38a1
14a1
14a2
T
P
38a2
42a2
40a2
34a2
36a2
INT
RS

FIG. 3A

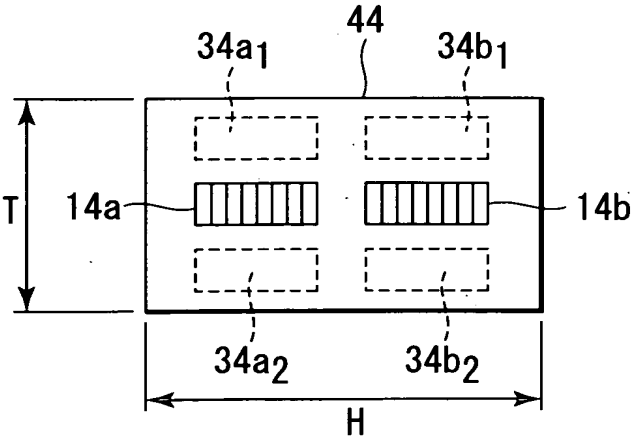

44
34a1
34b1
T
14a
14b
34a2
34b2
H

FIG. 3B

FIG. 4A

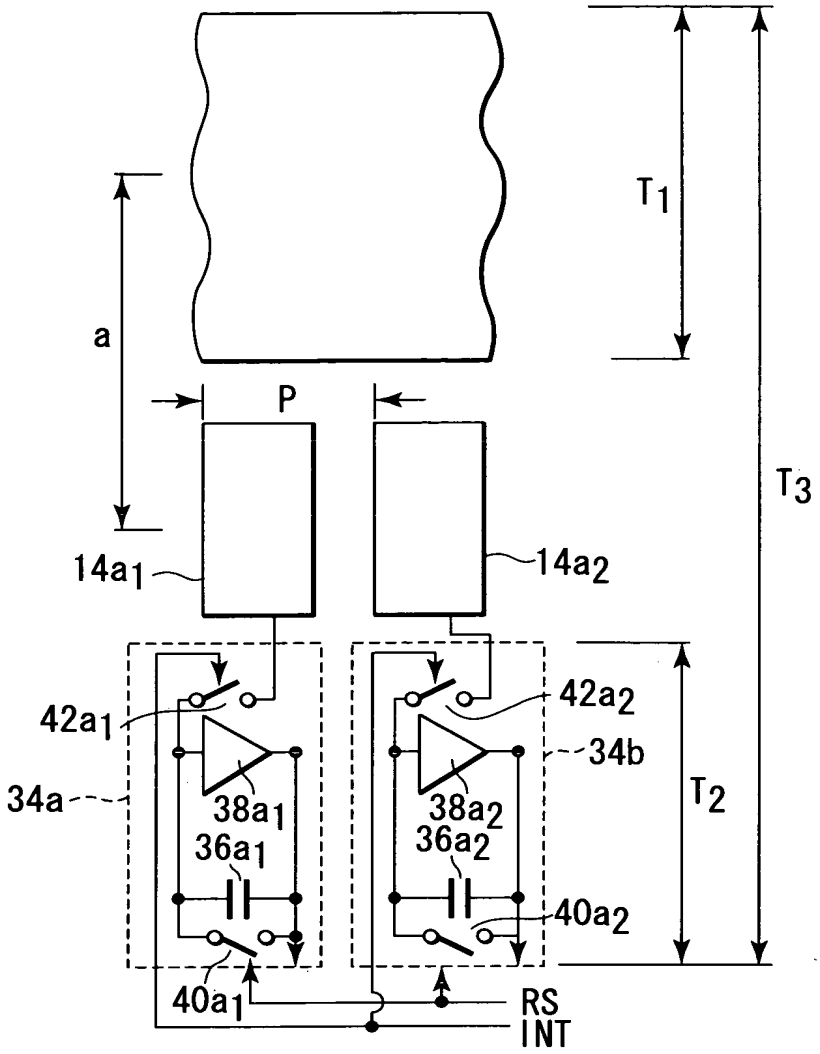


FIG. 4B

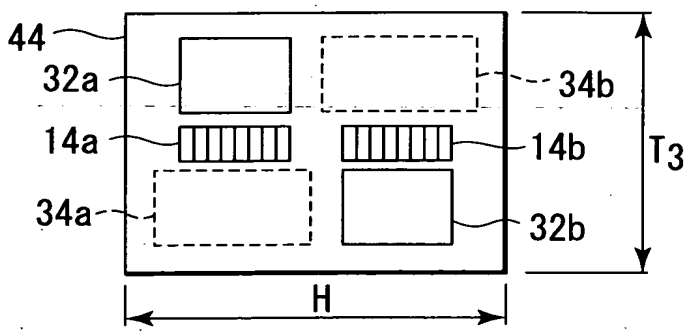


FIG. 4C

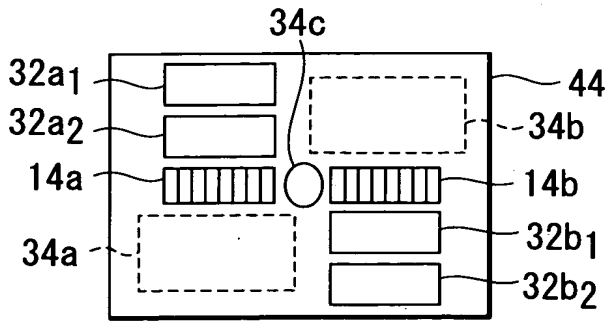
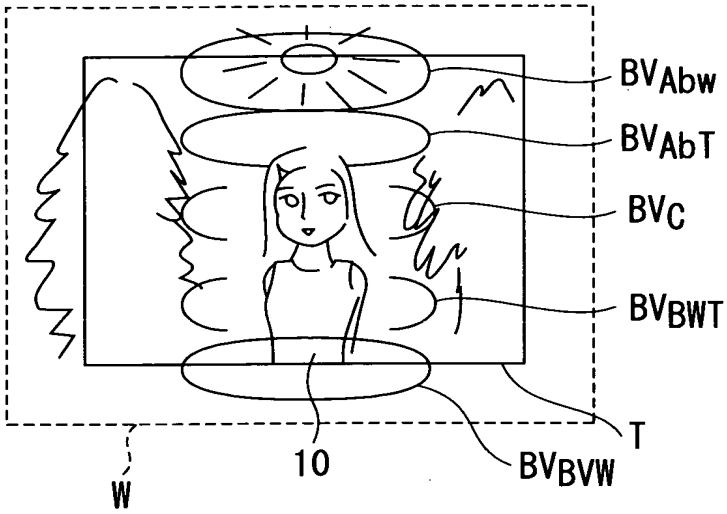


FIG. 5


BV_Abw
BV_AbT
BV_C
BV_BWT
T
10
BV_BVW
W

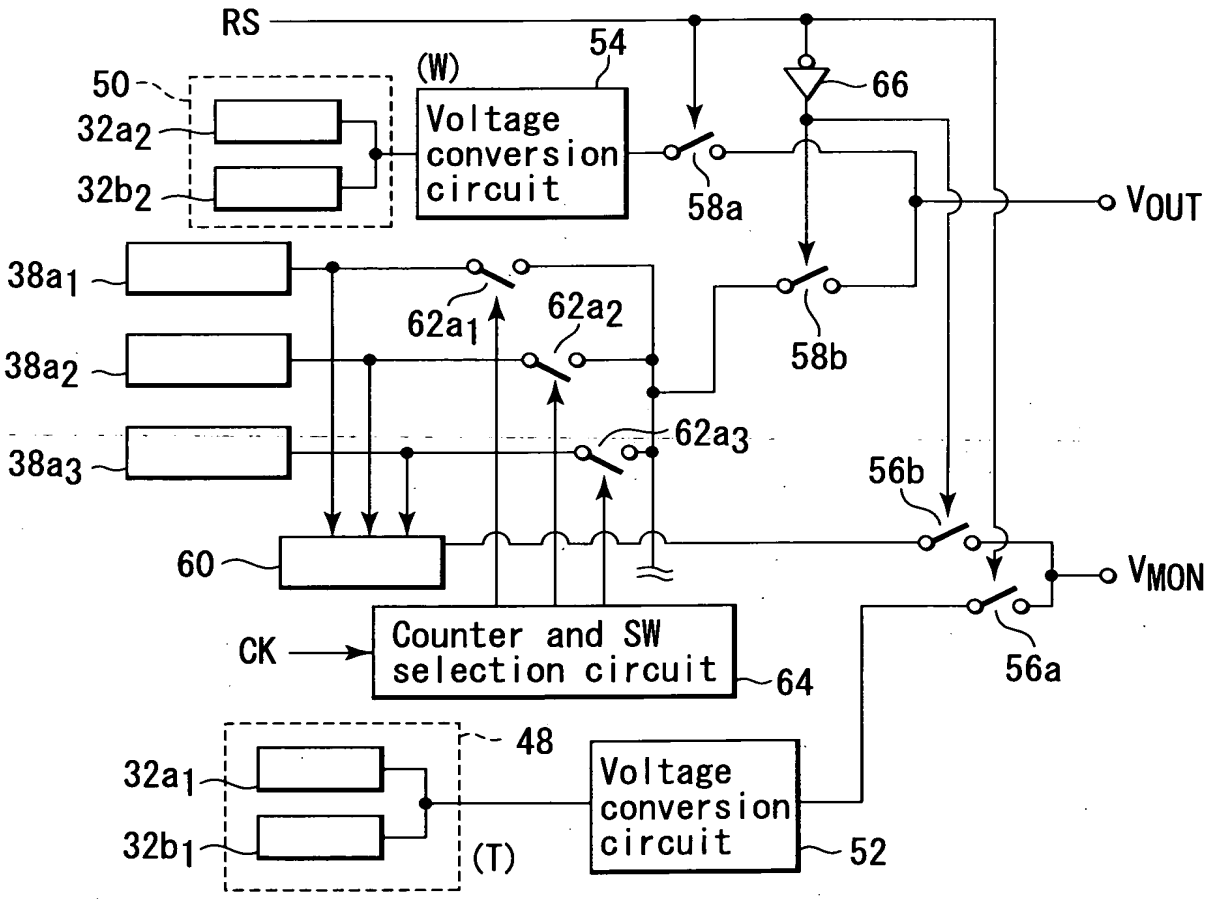

RS
54
(W)
50
32a2
32b2
Voltage conversion circuit
66
58a
VOUT
38a1
38a2
38a3
62a1
62a2
62a3
58b
56b
60
VMON
CK
Counter and SW selection circuit
64
56a
48
32a1
32b1
(T)
Voltage conversion circuit
52

FIG. 6

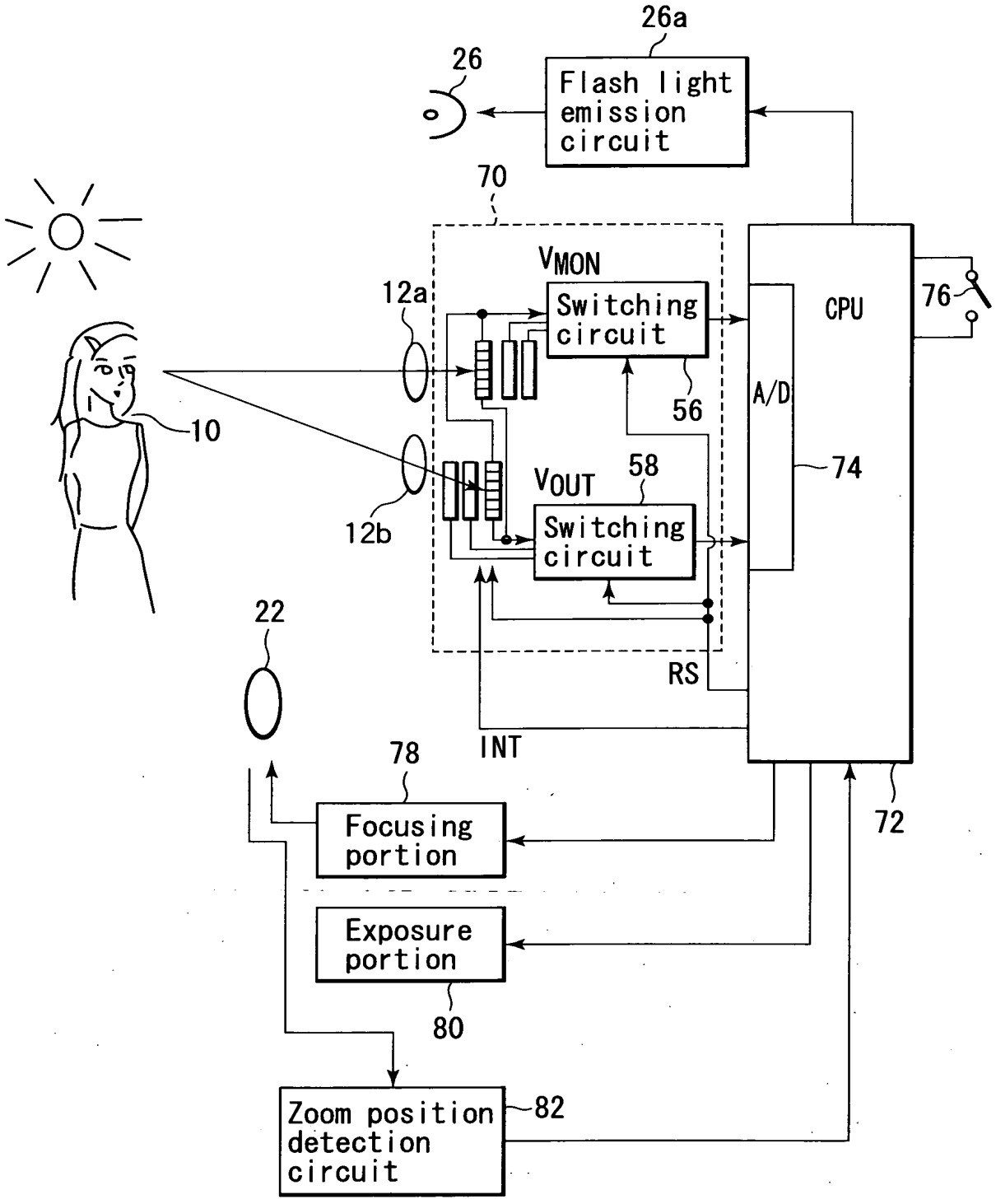

26a
26
Flash light emission circuit
70
VMON
12a
Switching circuit
CPU
76
A/D
56
10
74
VOUT
58
12b
Switching circuit
22
RS
INT
78
72
Focusing portion
Exposure portion
80
Zoom position detection circuit
82

FIG. 7

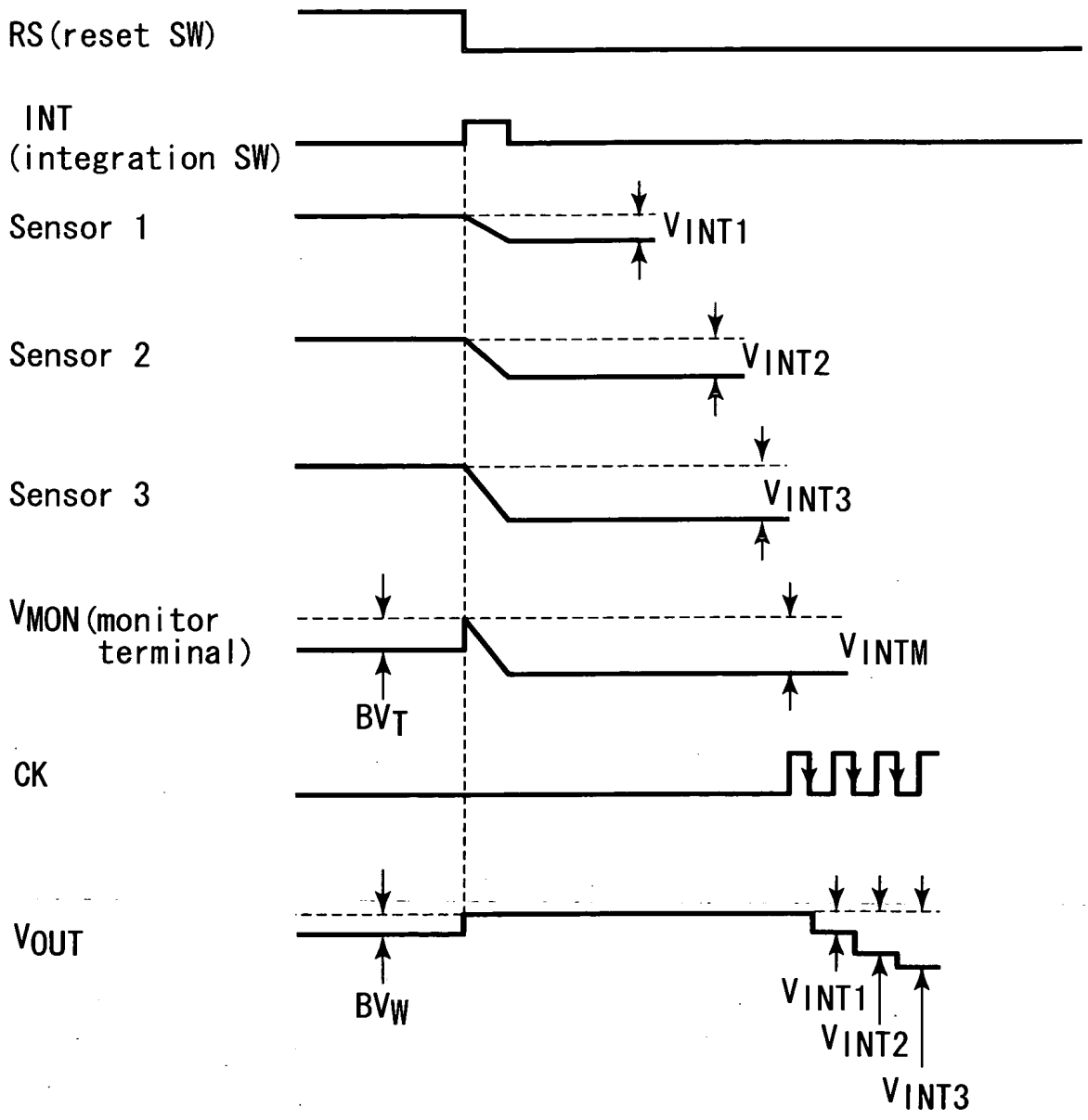

RS(reset SW)
INT
(integration SW)
Sensor 1
VINT1
Sensor 2
VINT2
Sensor 3
VINT3
VMON(monitor terminal)
VINTM
BVT
CK
VOUT
BVW
VINT1
VINT2
VINT3

FIG. 8

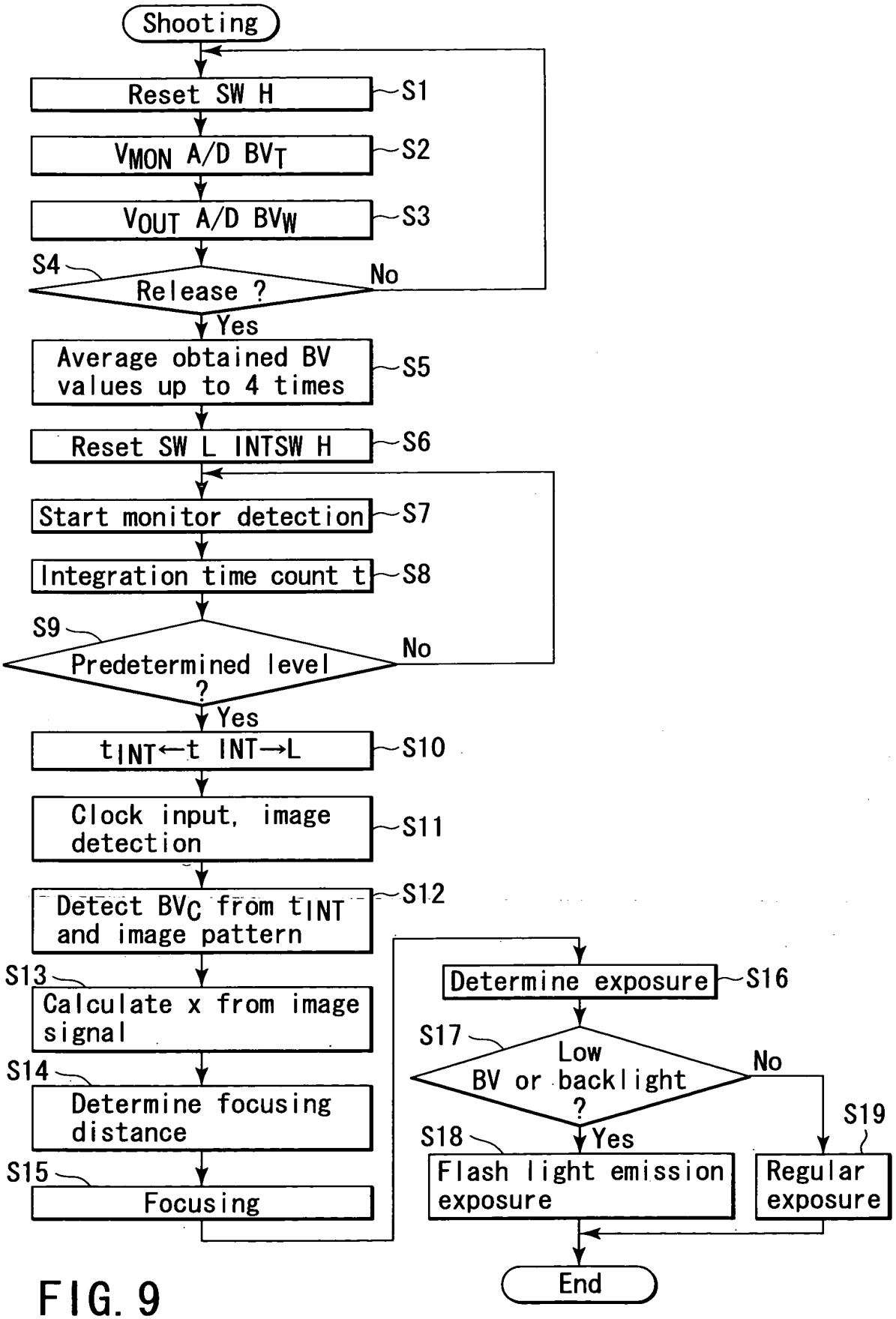

Shooting
Reset SW H
S1
VMON A/D BVT
S2
VOUT A/D BVW
S3
S4
Release ?
No
Yes
Average obtained BV values up to 4 times
S5
Reset SW L INTSW H
S6
Start monitor detection
S7
Integration time count t
S8
S9
Predetermined level ?
No
Yes
tINT←t INT→L
S10
Clock input, image detection
S11
Detect BVC from tINT and image pattern
S12
S13
Calculate x from image signal
S14
Determine focusing distance
S15
Focusing
Determine exposure
S16
S17
Low BV or backlight ?
No
Yes
S18
Flash light emission exposure
S19
Regular exposure
End

FIG. 9

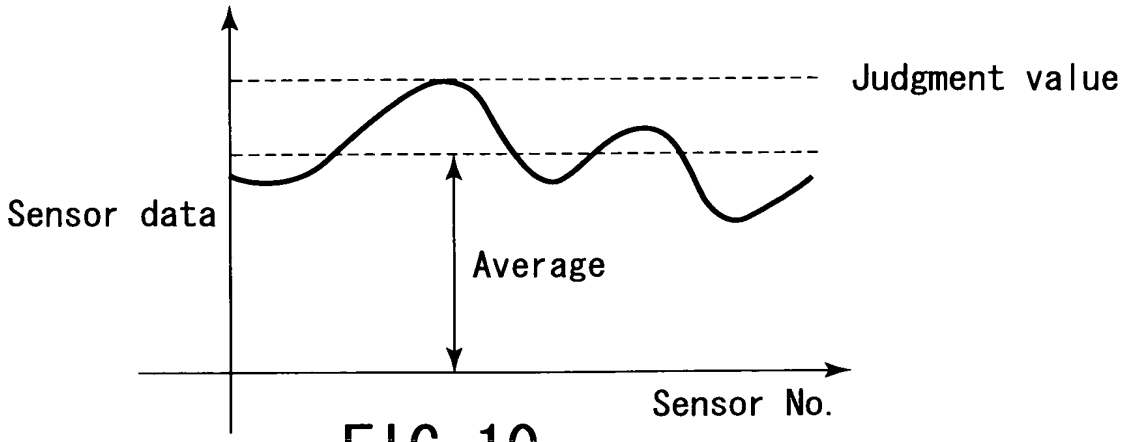

Judgment value
Sensor data
Average
Sensor No.

FIG. 10

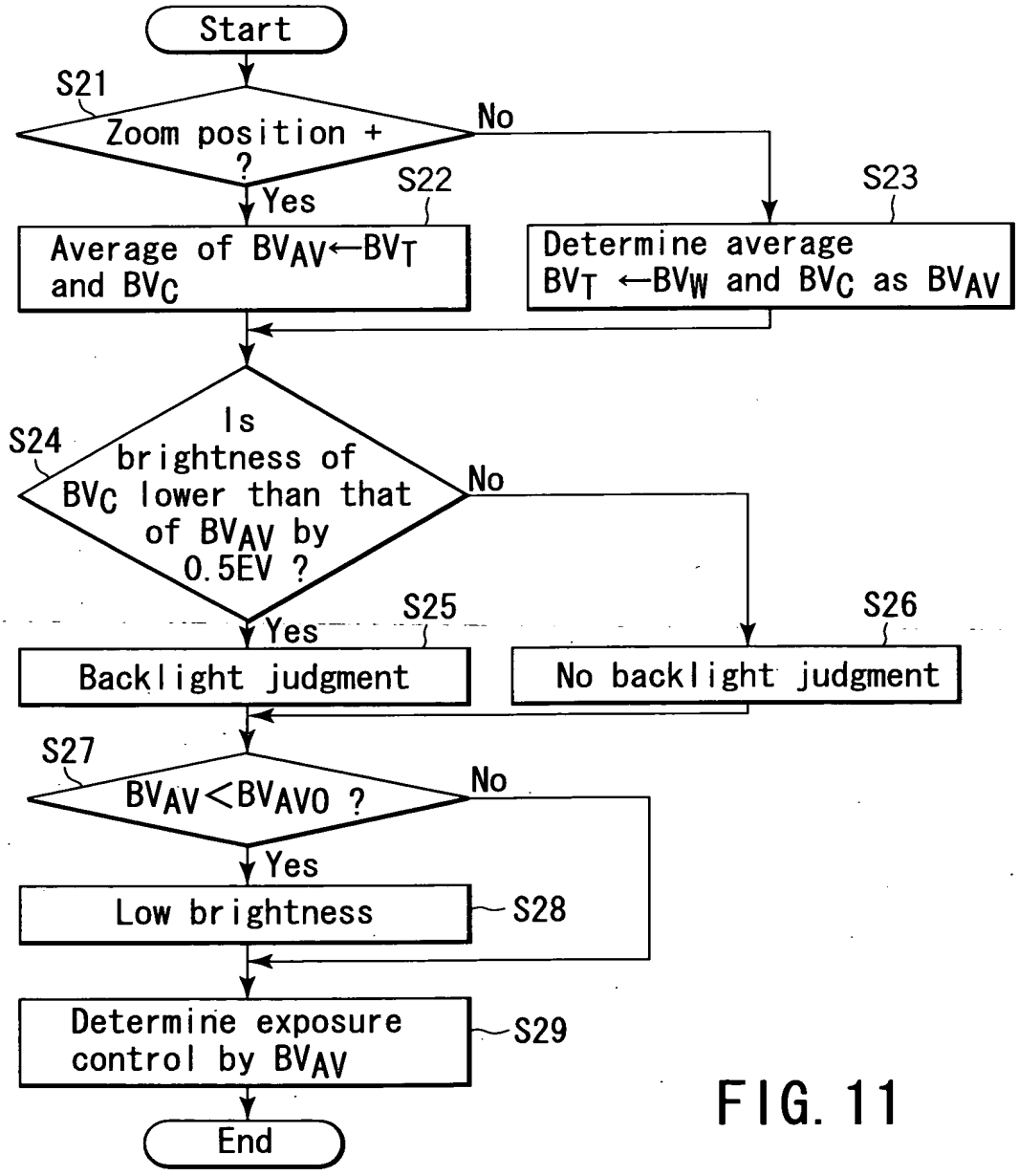

Start
S21
Zoom position + ?
No
Yes
S22
S23
Average of $BV_{AV} \leftarrow BV_T$ and BV_C
Determine average $BV_T \leftarrow BV_W$ and BV_C as BV_{AV}
S24
Is brightness of BV_C lower than that of BV_{AV} by 0.5EV ?
No
Yes
S25
S26
Backlight judgment
No backlight judgment
S27
$BV_{AV} < BV_{AV0}$?
No
Yes
Low brightness
S28
Determine exposure control by BV_{AV}
S29
End

FIG. 11

FIG. 12

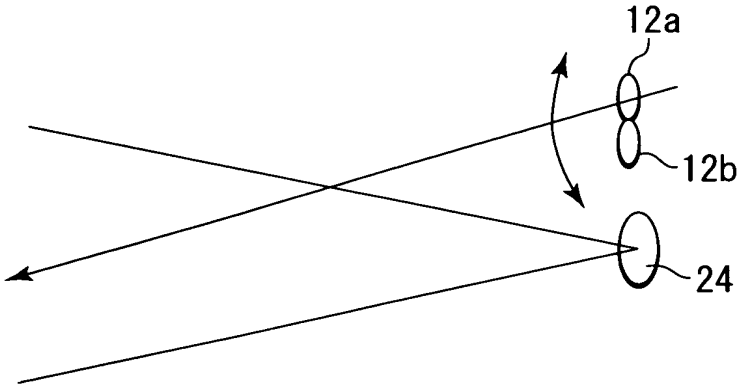


FIG. 13A

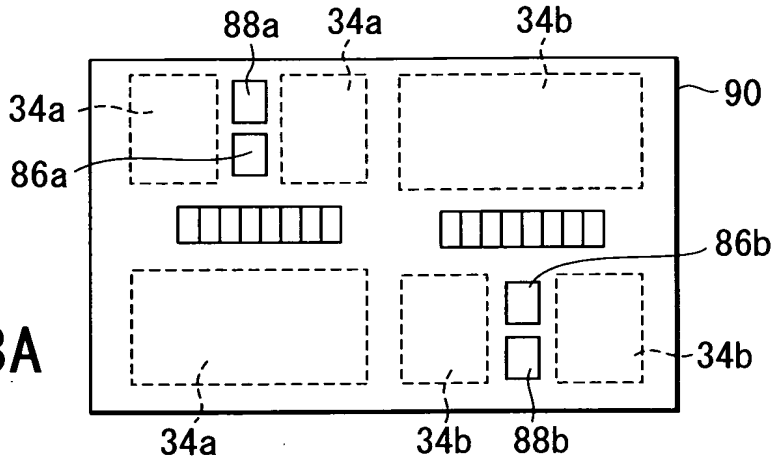
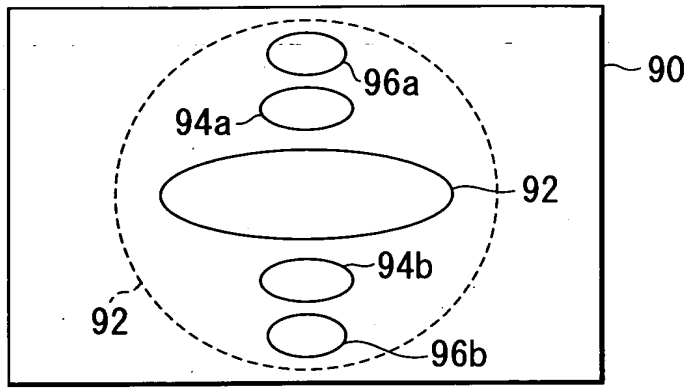



FIG. 13B